

CACTUS AND SUCCULENT JOURNAL

Of the Cactus And Succulent Society
Of America

Vol. XVII DECEMBER, 1945 No. 12



FIG. 101. *Euphorbia intisy*, the rubber plant of Madagascar, was used as a Christmas tree by Boyd L. Sloane.



CACTUS AND SUCCULENT JOURNAL

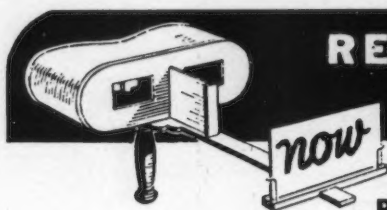
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Vol. XVII

DECEMBER, 1945

No. 12

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REMEMBER THE STEREOSCOPE?

... SEE MODERN STEREOSCOPIC
PICTURES in full-color KODACHROME

AND A DESCRIPTIVE BOOK

"Succulent Plants" by W. Taylor Marshall with 140 three-dimension, full color stereoscopic illustrations by Rupert Leach. Published for Sawyer's, Portland, Oregon, at Abbey Garden Press. Price \$11.50 with View-Master.

The publication of this book marks a unique and important forward step in the technique of book illustration. Here for the first time the reader may see full-color, photographic, Kodachrome illustrations of text material in the true-to-life realism of third dimension. Natural history students, horticulturalists, flower and plant lovers, as well as the general reader will, we hope, find in this volume and the stereoscopic illustrations which accompany it, a new appreciation of the beauty of form and color of cacti and other succulent plants as well as an accurate knowledge of the terrain to which these plants are native. Almost four years were spent in making the hundreds of three-dimension, full-color photographs from which one hundred and forty were selected to illustrate this text.

The book is divided into the following chapters with readable descriptions of representative plants of cacti and the other succulents: *Succulence in Plants, Parallelism, Fasciation, General Culture, Succulent Plant Names, Fig Marigold Family, Century Plants, Desert Milkweeds, Pineapple Family, Cactus Family, Daisy Family, Orpine Family, Spurge Family, Candlewood, Lily Family.*

The last eight pages consist of a bibliography of over 300 books and magazines related to succulent plants; this is the most complete list ever published.

The View-Master stereoscope and 20 stereoscopic reels which come with, and are a part of this book, make possible the unusual illustrative method used. The reels contain the one hundred and forty serially numbered pictures referred to in the text matter. As each picture comes into viewing position in the View-

Master stereoscope, information relative to the plant shown appears in the caption window of the viewer. No other projector, screen, or equipment is needed.



Order your copy and the View-Master direct from Abbey Garden Press. Send no money until you receive the book and the views which will be sent by Express with the invoice.

LET'S GO TO MEXICO or Time Out for Adventure by Ramsey and Kelly. Now is the time to read up on this interesting country because you will soon be there. This interesting travelogue is well illustrated with photos and sketches. \$2.85 postpaid in U.S.A., Foreign \$3.25. Sales tax in California.

WHAT KINDA CACTUS IZZAT? by Reg Manning, famous cartoonist of the Southwest. This 100 page book is packed with humorous cactus drawings which are based on hundreds of interesting facts. For amusement and information, this book is unique. Ideal as a gift book for those who hate or enjoy cacti. Cloth bound \$1.30 postpaid.

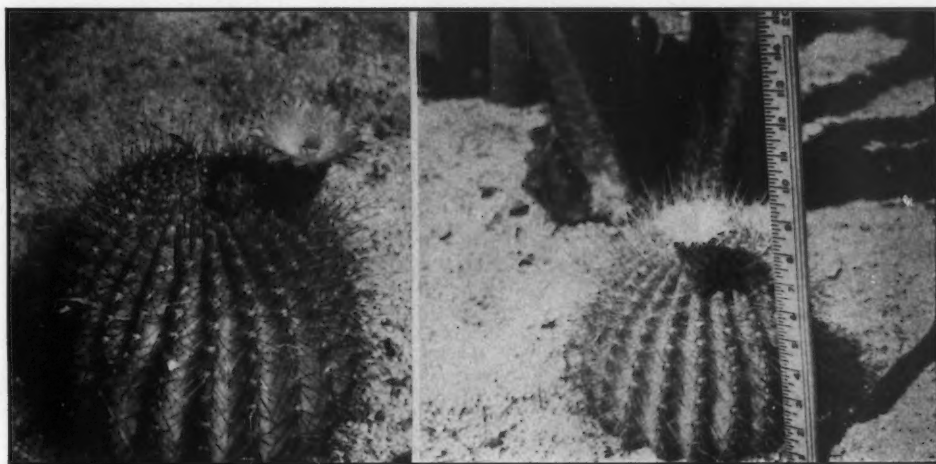


FIG. 102.

Lobivia formosa (Pfeiffer) Marshall. A flowering plant in the garden of Carl Brassfield who also took the picture.

Lobivia formosa

By W. TAYLOR MARSHALL

Lobivia formosa (Pfeiffer) Marshall.

Echinocactus formosus Pfeiffer, Enum. Cact. 50. 1837.

Echinopsis formosa Jacobi Salm Dyck in Cact. Hort. Dyck. 1849. 39. 1850.

Echinopsis formosa spinosior Salm Dyck in Labouret Mono. Cact. 303. 1853.

Echinopsis formosa laevior Monville in Labouret Mono. Cact. 303. 1853.

Echinopsis formosa rubripina Monville in Labouret Mono. Cact. 303. 1853.

Echinopsis formosa Br. & R. in Cactaceae III:75. 1922.

Acanthocalycium formosum Bckbg. in Kakt. ABC 224. 1935.

Stem solitary, globose to short cylindrical, up to 50 cm. high in age, pale gray-green; ribs 15 to 35, straight; radial spines 8 to 16, acicular, white to yellowish; central spines 2 to 8, flesh colored to dirty white, dark at point, up to 7 cm. long; flowers funnellform-campanulate, 8 cm. long and broad, covered with numerous small scales, these hairy in their axils; inner perianth segments golden yellow.

Type locality: Mendoza, Argentina.

Distribution: Western Argentina.

Lobivia formosa is assigned to the genus *Lobivia* because of the short, diurnal flowers,

typical of the genus. Backeberg assigned the plant to his genus *Acanthocalycium* which is characterized by flowers with a ring of hairs inside the tube just above the ovary, a character that *L. formosa* lacks.

Britton and Rose left the plant in the genus *Echinopsis* to which Jacobi assigned it instead of referring it to their genus, *Lobivia*, because they knew the plant only from descriptions and very poor illustrations (Cact. III:75). Had they seen the flower they would undoubtedly have assigned it to *Lobivia* as I now propose.

Lobivia formosa is a very common plant in collections in the United States, many specimen plants of considerable size can be found, but it has not flowered until now. Mr. Carl Brassfield of Sherman Oaks, who has flowered so many species for the first time has to his credit the first flowering of this species also. I am deeply indebted to him for bringing me the flower under difficult war time conditions, a distance of over 40 miles, and for his photographs which are reproduced here.

The species is attractive and easily grown, requiring only a well drained but very porous soil, rich in leafmold. Water can be freely supplied in warm weather.

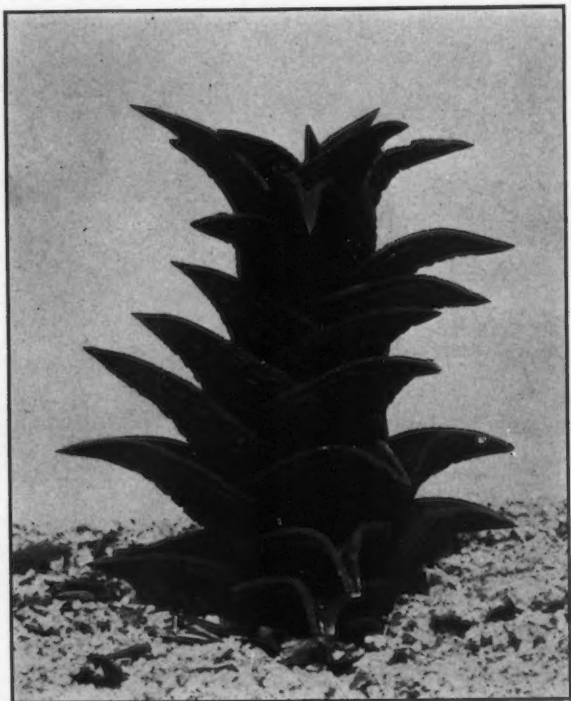


FIG. 103.

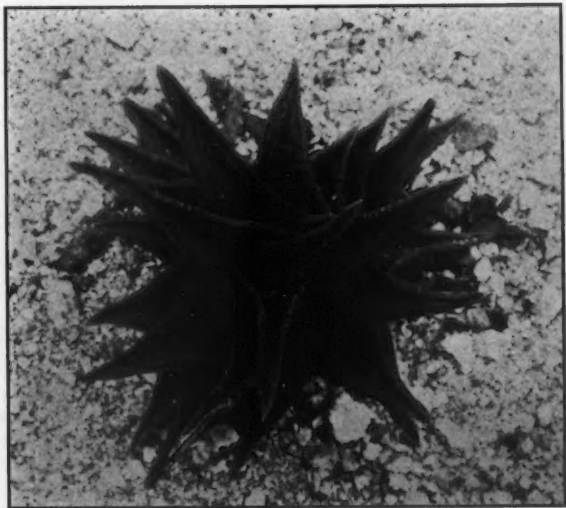


FIG. 104.

Haworthia Ryneveldii Poelln. nat. size.

Notes On Haworthias

By J. R. BROWN

Haworthia Ryneveldii Poelln. in Repert. Sp. Nov. XLVI (1939) 271, in Desert Plt. Life XI (1939) 88, photo.

Plant with a leafy stem, 7 cm. or more tall, and 4-7 cm. in diam.

Leaves ovate-lanceolate, acuminate, 2.5-4 cm. long, 1.5-2.5 cm. broad towards the base, the younger leaves erect, the older more spreading, the apex ending in a very short point, dull blackish-green, both sides of leaves with tubercles which are greenish and somewhat shining on the younger leaves, but becoming gray and dull with age.

Peduncle simple, 30 cm. or more tall including the raceme; pedicels 2 mm. long, bracts 2-3 mm. long; perianth 14-16 mm. long, the tube whitish with brown keels, the whitish segments obtuse with dark green lines.

Locality: Cape Colony; Somerset East Distr.

Named after Mr. Armstrong van Ryneveld who discovered it.

This *Haworthia* is closely allied to *Haworthia Schmidtiana*. Poelln., the color of the leaves

and the shape, color, and arrangement of the tubercles is similar, but it is distinct by the multifarious arrangement of the leaves and for which reason it is placed in the sect. *Rigidae* Haw. The leaves are also more erect, only the older leaves recurving at the tips.

A very old plant of *Haworthia Ryneveldii*, growing out of doors, is shown in the illustration of this species. A view of the top of this plant is also shown, so that the multifarious arrangement of the leaves may be more clearly seen.

Haworthia Schmidtiana var. *diversifolia* forma *nana* Poelln. in Repert. Sp. Nov. XLIV (1938) 240.

Plant 1.5-2.5 cm. tall.

Leaves 13-15 mm. long, 12-15 mm. broad towards the base, with lightly recurving tips.

Locality: Cape Colony; Beaufort West.

This is an interesting dwarf form and is very slow growing, the annual growth being scarcely appreciable. The plant illustrated is the tallest of this form which I have seen and is growing out doors.

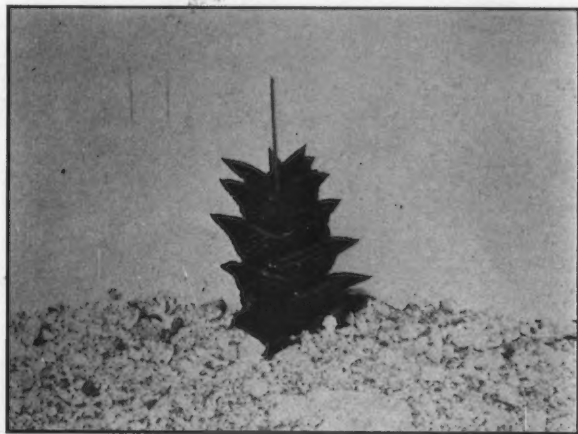


FIG. 105. *Haworthia Schmidtiana* var. *diversifolia* forma *nana* Poelln. nat. size

FROM DE WAYNE CACTUS GARDENS

After reading your "Editor's Notes" in the October issue of the "Cactus and Succulent Journal," I thought you might be interested in what we are trying to do for the private collector.

First, cacti are, or should I say were, a hobby with both Mr. De Wayne and myself. Having had a collection of our own for several years, we know how difficult it is for a private collector to obtain the plants they are looking for, or the basic fundamentals on their care. Therefore we are always willing to help people in any way possible. "Cacti for the Amateur," "Succulents for the Amateur," and the booklet "Cacti and Succulents and How to Grow Them" are always on sale at our nursery. In addition to these we have a reference library made up of Britton and Rose Monograph, Marshall and Bock's "Cactaceae," "The Mammillaria Handbook," "Glossary of Succulent Plant Terms," and the current issues of the "Cactus and Succulent Journal" which are always open to the public.

We also send out retail listings, which as you said is a lot of work. After we have worked all day in the Nursery we go home to spend what should be an evening of leisure, sitting at a typewriter. Sometimes we wonder if it is all worth while, from a financial angle it isn't. Then when we seem to be at our lowest ebb, someone will write in and tell us how well the plants were received. That boosts our morale again and we pound the typewriter just that much more.

We wholesale to florists and nurserymen all over the country, but as long as Mr. De Wayne and myself are physically able we will continue to take care of the private collector, for he is the person who is going to keep cacti and succulents from becoming extinct.

DORIS DE WAYNE

FROM CHARLES R. COLE OF K.I.O.

Answering Mrs. William A. Wanner in "The Flower Grower."

"For dry rot on cacti try watering thoroughly once a week with the following: 2 teaspoons ammonia to 1 quart water. Continue this treatment for 13 weeks. Cut off affected stems and dust with sulphur. Dark spots appearing on cacti, spoiling the looks of the plant but not seeming to affect its growth, may be due to poor soil. The remedy is well rotted manure."

One of our members, Mrs. Diehl, tried this ammonia treatment on some sick Epiphyllums with success. The plants are doing fine and seem to have set buds for next year.

I rooted a cutting of an Epiphyllum, with a 1/2 inch bud on it. Rooted it in a milk bottle with the water just touching the end of the plant and allowed the water to evaporate as the roots grew to it. About a week later I planted it in well rotted leafmold and plenty of rain helped. Bud is now 2 1/2 inches long and doing fine.

HUMMEL'S VICTORY PICTURE BOOK

The popular demand for this 40-page book has necessitated the third printing. Hummel's Exotic Gardens has given the Abbey Garden Press permission to publish this Third Edition. 25c each postpaid in the U. S. A. Foreign 30c each.

The Flowering Plants of South Africa. A complete set of 23 volumes of hand-colored plates with descriptions of flowering plants indigenous to South Africa. Includes many plates of Aloes, Haworthias, Ceropegias, Mesembrys, bulbous and other plants. Beautifully bound set now available for \$400.00.

Box 101 — Pasadena 16 — California



FIG. 106. Lt. George Lindsay viewing a side-walk cactus stand in Paris. The *Opuntia* in the background was priced at \$25.00.

EDITORIAL

This issue of the JOURNAL marks the seventeenth year of publication. It has weathered two depressions and a world war without missing a single issue nor lowering its printing standards. Labor and materials have been difficult but both would have been of little avail if it had not been for the loyal contributors. The interest shown by the readers of this magazine has stimulated those of us who have had the time to continue with our work. We want to thank both the writers and the subscribers for their cooperation.

Starting the New Year with the largest circulation in the history of the JOURNAL we hope to carry out many of the plans which have been delayed because of wartime conditions. We hope that many of the old writers may now have the time to continue their contributions that we have missed. The boys in the service did not let us down and kept up their contact with the JOURNAL and as they slip back into civilian life they will have a renewed appreciation for each and every contribution.

We can look forward to the promised articles on the "Cacti of Peru" by John Akers who is with the Goodyear Tire and Rubber Company of Lima, Peru. Dr. E. J. Alexander, who has just returned from a year in Mexico, will have startling new things to report. There will also be photos of Orchid Cacti (hybrids) as fast as their descriptions are completed; these will tie up with the forthcoming "Epiphyllum Handbook" (now in type form and awaiting completion of the 100 printing plates). Among the reprints we propose to reprint *Blanc's Catalog* and the *Baltimore Cactus Journal*. We will present from time to time reprints of the illustrations from *Bluehende Kakteen* (1921). And you will hear from your Editor's assistant, Edwin Gueguen, regarding a plan for the quarterly publication of actual color photographs.

The year of 1946 will be a big year for cactophiles. In the meantime the Executive Board and your Editor takes this opportunity to wish you all a Merry Christmas.

SCOTT E. HASELTON.

"BRAZIL, ORCHID OF THE TROPICS"

An expedition into the remote rain forests and deserts of Brazil in search of rare plants of Bromeliads and Cacti is one of my favorite day dreams and the next best thing to a personal trip is a vicarious one with Mulford and Racine Foster.

These delightful naturalists take us on such a trip in their new book, "Brazil, Orchid of the Tropics." The text is written with simplicity and understanding and with them we thrill to the discovery of new species and the relocation of species described years ago but not available to plant lovers since that first record.

The book is not a dry record of plant material but a glimpse into the home life of native people and plants in the back country of the states of Bahia, Espirito Santo, Sao Paulo and the Matto Grosso. The primary purpose of the trip was Bromeliads but Cactus is the secondary interest of the Fosters and they encountered rare species of *Rhipsalis*, *Zygocactus*, *Arrojadoas*, *Melocactus* and *Cereus*. Their accounts of the habitats of the cacti provide information on the ecology of them which can guide us in naturalizing species of these genera in our gardens.

One hundred and thirty-seven black and white photographs and four kodachromes in addition to numerous sketches by Mulford Foster add greatly to the interest of the book which I list as a "must" for growers of epiphytic cacti, botanists and armchair adventurers.

Of particular interest to me is a picture showing a species of *Melocactus* living in perfect harmony with species of *Bromeliads* and the vanilla orchid and one showing *Bromeliads* growing on numerous plants of *Pilocereus Gounellei*. Perhaps the shortage of bacon here would become less acute if our farmers had orchids of rare beauty growing in our pig-pens as is shown in one of the illustrations of the Foster book.

Available at Abbey Garden Press, price \$3.50; postage U.S.A. 10c, foreign 25c. Sales Tax on California sales 2½%. Abbey Garden Press, Box 101, Pasadena 16, California.



FIG. 107. Sgt. Robert Rose, in the 90th Div. with Patton's 3rd Army, discovers a budded Rat Tail (*Aporocactus flagelliformis*) in the last C. P. before crossing the Rhine River.



FIG. 108. *Epiphyllum pumilum* from Oaxaca, Mexico.

EPIPHYLLUM OXYPETALUM AND PUMILUM IN OAXACA

By T. MACDOUGALL

Epiphyllum oxypetalum is another of the 'old' species, well and widely known under cultivation yet seldom recorded in the wild. Like *E. Ackermannii* it is usually ascribed to the Orizaba region of Veracruz but with so little additional information as to make one inclined to doubt. Thus it was, when, in Mexico in March, 1944, I happened on dormant plants of *E. oxypetalum*, I thought the odds favored still another undescribed species. With *E. pumilum* it was different. This species was understood to be common in Guatemala, and I had found it once before in Oaxaca.

The discovery of these two species, growing side by side, was an incidental result of an expedition into the rain forest to survey remnants of the old Castilla rubber plantations of "El Modelo" approximately half-way between the Gulf of Mexico and the Pacific Ocean, on the Isthmus of Tehuantepec. Our trip started from Mogoñé, on the Tehuantepec National R. R. From there we walked east by north-east. The first "jornada" took us to a little settlement of Seventh Day Adventists on the west bank of the Coatzacoalcos river. The "El Modelo" development had been abandoned 25 years before and

with it the "ferry" across the river. Now the wide and deep Coatzacoalcos marked the limit of native settlements in this direction. Boat travel is also limited by a series of rapids farther down stream. The Adventists owned a single dugout canoe and we were lucky to be taken across the river before dusk, as Friday evening stopped all Adventist activities. That night we camped on a strip of sand at the foot of the high, forest covered east bank of the river. Next day we followed a faint trail, kept open by occasional fishing parties from the settlement, and of "wild cat" rubber hunters, from other parts. Before dusk we reached our destination on the east bank of the Chalhijapa river, tributary of the Coatzacoalcos, a beautiful stream of wide and shallow water abounding in fish.

Epiphyllum oxypetalum and *E. pumilum* were common along the trail between the Coatzacoalcos and Chalhijapa rivers. Occasionally the plants grew on trees but, more commonly in shallow humus on isolated masses of limestone that projected well above the forest floor. A third *Epiphyllum*, of the "strictum" group," was noticed occasionally, growing only on trees. The forest we had traversed was on gently rolling



FIG. 109. *Epiphyllum pumilum* approximately natural size.

land with an average elevation of not more than a few hundred feet above sea level and at no point did we reach 1000 feet.

Back in New York some cuttings were grown along and now I have a flowering plant of each species.

To date, October 6, *E. oxypetalum* has produced three flowers and *E. pumilum* ten or more and the latter has as many more buds in various stages. Noticeable in the flowers of *E. oxypetalum* were the greenish tubes and outer perianth lobes. Perhaps light conditions had something to do with this, but *E. oxypetalum* also appears to be one of the variable species. The "forms" known as *Purpusii* and *latifrons*, indicate this. The *E. pumilum* flowers do not duplicate those of the previous collection. I am unable to make direct comparisons, but they are considerably smaller. The tube is approximately 3 cm. and the longer of the (outer) perianth lobes are about the same. These proportions may prove rather upsetting taxonomically.

E. pumilum is perhaps unique in its flowering. Buds will be "inflated," ready to open, at dusk; yet at no time have I seen an open flower, even by 1 a. m. One night I found flowers fully open at 2 a. m. and surmised that I had discovered the "opening hour" for the species. This summer, with the plant collected in 1944, I "out-waited" three buds one night. These started to open at 2:30 a. m. and were fully open by 3 a. m.* All three opened in unison.

*Standard time throughout.

I suspect that a certain period of darkness is required before the flowers will open, and that temperature is a modifying factor. Flowers stay fully open into the late morning—until noon on a cool day. The flowers of *E. oxypetalum*, when at the right stage, commence to open soon after dusk and they wilt equally soon after dawn.

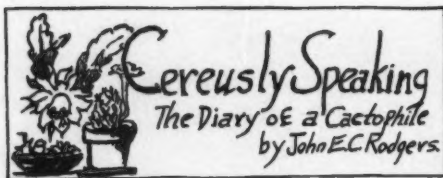
Just why this time divergence in these two species—the largest and smallest flowered of the *Epiphyllums*—with similar habitats, and with flowering periods overlapping, if not coinciding, is a question that might possibly be answered if the means of pollination were known.

FUSARIUM DISEASE OF PRICKLY PEAR

This *Fusarium* is being used successfully as the only economical means of clearing cactus from several thousand acres of range on one ranch. Already 1000 acres has been made accessible to cattle and the inoculation work goes on enthusiastically. No natural means of spreading the disease has been discovered; inoculation of the cactus with spores of the fungus is manual. Our red or purple flowered *O. megacantha* has been found to be susceptible while the white flowered type is not very susceptible. Night Blooming *Cereus* and the spineless cactus are not susceptible to inoculation.

C. W. CARPENTER, Associate Pathologist.

Experiment Station of the Hawaiian Sugar Planters' Association, Honolulu, U. S. A.



December 1. Arranged my Euphorbias in the south-east corner near the source of heat, my ether-disk-controlled-brooder-stove. Stove has been going since November twentieth. 22° today and colder predicted. Watch the weather reports from Chicago for our weather 3 days later. Nice of your numerous Chicago Cactophiles, isn't it?

December 3. *Mammillaria elongata* (contest plants) budded. Will furnish blooms for two months. Delightful! Buds on rotted "arm" of *Euphorbia caput-medusae*. Never really knew what I had missed until Dr. Otto Laporte, Ann Arbor, Michigan, sent me an eight-armed plant; saw where a "sure way" to make these "arms" develop heads is to cut out the top (Journal Volume III, page 28) and plants will develop at the base. Good name "Head of Medusa," the snaky-haired female of Greek mythology. *Lepismium commune* still blooming after twenty-two months. *Graptopetalum* growing. *G. paraguayensis* still my favorite. *Crassula tecta* has 9 heads. Budded last year. Three new heads developed around base of spent bloom stalks.

December 6. Buds showing on *Schlumbergera Gaertneri*, that red aristocrat of the epiphytes. *Ha-worthia cymbiformis* in bloom. The first of my 35 species (or varieties whichever it is) that blooms.

December 10. Gave the whole collection a thorough watering. Local florists no longer use *Hamatocactus setispinus* in bowl arrangements. Use those beautiful green Echinopses. Texas cacti did not appear at 5 and 10's in strawberry baskets at 15c per this year. Plant concessions more up to date. Potted ones from the Heindle Nurseries sold in small red clay novelty pots. *Thelocactus bicolor* and *Hamatocactus setispinus* rareties now for local collectors.

December 12. Everything covered with a ten-inch snowfall. Autos stalled. Busses ditto. Walked a long mite to school. *Huernia pillansii* has turned purplish red toward the base of main plant and offsets. "Burr Stapelia" it's called in most collections here. Resting since weekly waterings have begun. *Cochemisea poselgeri* and *setispina* are both interesting plants for window collections from Lower California. *C. poselgeri* has a tendency to become procumbent.

December 15. *Mammillaria fragilis* bloomed. *Opuntia microdasys* worth cultivating. Has beauty of its other relatives but not the "militant specules." (Bunny ears) but I'm a little on the "unaffectionate" side. Cold! 12° today.

December 18. Second bloom opened on *Epiphyllum Ackermannii*. Sprayed collection with cold water to discourage red spider and washed off dust. Moisture like white velvet covers the roof glass. Good insulator I understand, helps to hold in the heat. *Rhipsalis teres* budded. Yellow blooms. Put my large *Crassula portulacaria*, *Euphorbia splendens*, and *Mesembryanthemum blandum* in school kitchen for Christmas holidays. Left note to water twice a week.

December 22. Stirred the surface soil of all the pots to insure aeration. 3° below today, coldest so far this year. Colder predicted. Buds on *Pseudorhipsalis micrantha*, gray-orange outer segments "ballooning"

but ends still sealed. Yellowish-white within. Christmas message from Mrs. Jones, Cactophile of Oberlin, Ohio, offering gifts of large plants which have outgrown her sun room. Accepted! Is there such a thing as "cactus saturation?" We're either all out for cacti, or they can't stand them. Notice I said "they" not "we" folks.

December 25. Sprayed whole collection to remove dust and dirt. Such "springy" odors from the moist soil made me count the days until spring. Winter just started, too. *Pseudorhipsalis micrantha* bloomed, creamy-white with an upright crown of stamens. Night temperature not below 45° since fire was started November 20th. Tried cross between *Epiphyllum Ackermannii* and *P. micrantha*. New York Botanical Garden used *Zygocactus truncatus* and *P. micrantha*; set fruit.

December 27. *Euphorbia Fournieri* 14 inches high with three heads. Top withered back or was injured, which made it offset. Had fourth head which I gave to Dr. Laporte. Prefers moist tropical treatment such as ferns get. Large leaved Euphorbias show ultra-tropical origin. 5° below zero, coldest December 27 since 1879. *Aloe variegata* in bloom. *Hattoria salicornioides* budded. *Gasteria caespitosa* original from Dr. Henry Shetrone (see July, 1945, JOURNAL, page 99) budded. One of the finest for all around culture. A prolific offsetter. "Give a friend" one, I call it.

December 31. Temperature on the upswing but plenty of snow. Ground not even frozen before it was blanketed. New Year's card from Attorney Laval Goulet, Canadian Cactophile, with its French message. Enjoyed. 130 days of sunshine. Dry summer. Plants enjoyed it. Christmas Cactus buds have at least two weeks to go. 20 *Mammillarias*, *Rhipsalis*, and *Epiphyllums* budded. Succulents, especially *Haworthias*, budded.

Herewith is finished the 4th year of the diary of a Cactophile. 4 years of enjoyable companionship through your letters, inquiries and "thank you notes." May you have a prosperous New Year and many Xerophytic blooms, offsets and enjoyable hours with our fascinating hobby.

MEASUREMENTS

Regarding your request for information of dealers in measuring plants and flowers, our method is as follows:

In quoting sizes on cactus plants, we measure the height or diameter, whichever is greater, without including the spine length.

In measuring flowers, we quote the spread of the flower as it actually grows. It would be a great exaggeration to add the length of two longer petals to the width of the throat and would be very misleading to customers purchasing same.

In the case of a tubular flower such as *Nopalxochia phyllanthoides*, commonly sold as *Epiphyllum Deutsche Kaiserin*, the actual diameter is about 2 inches, whereas, if the two longest petals were added to the width of the throat, the measurement would be approximately 4 inches, which is certainly not true. I intend to continue quoting measurements by the natural spread of the flower.

R. W. KELLY.

NEXT ISSUE

Because of the Index which occupies part of the current issue, we will postpone the continuation of "Do You Know the Bromeliads?" by Mulford B. Foster, and "Cacti in England" by E. Shurly, until the January issue.



SPINE CHATS

LADISLAV CUTAK



It was in 1934 that Mulford B. Foster of Orlando, Florida, reached the peak of his interest in cacti. As a result he made his first trip to Mexico the following year in search of these plants and then with his bride took two more trips, each time bringing back a wealth of living material for his Florida garden. On these cactus hunts he became very much enthused about certain epiphytic plants which often grew on the prickly stems of Cardons, Candelabros and Organos of the complex *Cereus* group. These air plants were mostly Tillandsias, belonging to the Pineapple family, botanically *Bromeliaceae*. He was already acquainted with the thirteen odd Florida species but he yearned to get better acquainted with the Mexican varieties which were much more diverse and much more beautiful and intriguing in comparison. Year by year his enthusiasm for bromels increased until a desire to visit Brazil—country, where the greatest array of luxuriant forms are to be found—became so strong he could not resist. Thus, with a serious purpose in mind, the study and collection of air plants, Mr. and Mrs. Foster boarded the *Troubadour*, a small cargo ship Brazil-bound in the spring of 1939 for a six-months sojourn in that country. That their first bromel expedition bore fruit is attested by the fact that they made another trip the following year and in all discovered nearly one hundred new species, a remarkable record far exceeding the one established by Glaziou, the famous French collector-botanist, who held the laurels for many years with an all-time high of sixty.

Their rendezvous with bromels, orchids and cacti was not always of a comfortable nature; in fact, it was just the opposite, for rare plants do not grow along main routes of travel nor where they can be plucked by merely reaching for them without stretching. Plant expeditions into jungle and desert regions often spell insurmountable obstacles, hard work and uncertain moments, but when the fruits of the trip are taken into account, then all the hardships and unpleasantness become but a memory. For a very interesting account of this couple's experiences in search of bromels and cacti, I highly recommend their new book, *BRAZIL, ORCHID OF THE TROPICS*, released last month by the Jaques Cattell Press of Lancaster, Pa. It contains 306 pages of entertaining text which is easily digestible and full of authentic information about the natural wonders of that great South American country. The book is profusely illustrated with 145 black and white photographs, 4 kodachromes and 32 delightful drawings, all made by the male author who is also an enthusiastic camera fan and artist of repute. A good many travel books are often crammed with over-emphasized, exciting personal tales in order to appeal to the masses but *BRAZIL, ORCHID OF THE TROPICS* seems to hold fascination without this kind of publicity and at the same time offers genuine knowledge about plant, animal and topographical features which are generally overlooked, omitted or minimized in the usual run of travel narratives. Yes, by all means you must secure a copy of *BRAZIL, ORCHID OF THE TROPICS*. It will open a new outlook on a group of plants as strangely intriguing as our own Cacti, in whose company they are often to be found in nature.

Another interesting book recently placed on the market is *A MANUAL OF SOUTHWESTERN DESERT TREES AND SHRUBS*, issued as a Biological Science Bulletin No. 6 by the University of Arizona. It is the work of our good friend, Dr. Lyman Benson, who did the revised edition of *THE CACTI OF ARIZONA* in 1940, and Dr. Robert A. Darrow. The book is semi-popular or semi-technical in character, designed for use in identification of trees and shrubs native to the desert regions of California, Nevada, Utah, Arizona, New Mexico and the Trans-Pecos portion of Texas. It contains 391 pages of text, describing approximately 300 species and varieties of plants, including yuccas, nolinus, dasylirions, agaves and many others which grow in association with cacti. The book is enhanced by 22 lovely kodachrome pictures, 88 black and white photographs, a number of distributional maps and a host of plant drawings. It should be included in your library.

R. A. Dyer, co-author with White and Sloane on *THE SUCCULENT EUPHORBIEAE*, describes a new *Brachystelma* from the Marico District of Transvaal in the July, 1945, issue of the *Journal of South African Botany*. In the same issue, M. R. Henderson brings out a new *Ceropegia* from the Cape Province. The new *Brachystelma gracillimum* is a perennial herb with a tuberous rootstock, distinguished from its closest ally, *B. Galpinii* by its taller and stiffer habit, and particularly in the much longer solitary and very slender flowers. The plant is rather rare because its tubers, like those of other *Brachystelmata*, are eaten by the natives. *Ceropegia Smithii* is a plant with a creeping stem, rigidly fleshy, obovate to elliptic oblong leaves and red-spotted and purplish-veined yellowish green flowers. The plant was described from dried material, a small living plant, preserved flower and buds in alcohol and a colored drawing.

John Milton Webber of the Fiber Crops Field Laboratory in Riverside, California, describes a new *Yucca* from northwestern New Mexico in the October, 1945, number of *Madroño*. This new desert lily, *Yucca navajoa*, is named for the Navajo Indians upon whose reservation the plants were first observed. It is said to be most closely related to *Y. Baileyi* but distinguished from it by its many more leaf rosettes per plant and slightly smaller flowers and flower parts. It is also unique in that it is the only species in the *Yucca glauca* complex, to which it belong, with dense clumping mainly due to the branching of an aerial caudex. The formation of a caudex itself is rather unusual, as elongated aerial stems are rarely formed within the *Y. glauca* group, and all other species of the group have been described as acaulescent.

The current December National Geographic Magazine carries an informative, 2-page story on the Saguaro written by that distinguished cactologist, Dr. Forrest Shreve. He states that mountains and plants are the outstanding features of the Arizona desert and these together give southern Arizona a landscape that seems to the traveler to be "out of this world." The article is illustrated with 9 natural color photographs.

To all my Cactus Friends: I give you another friendly Christmas greeting and remember, I'll be seeing you again throughout the coming happy New Year.

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